

HOW STATE LEGISLATORS CAN MAKE A DIFFERENCE

2

The Role of State Legislators in Promoting Green Schools

State legislators are much more than budget appropriators. They are leaders — directing efforts to craft legislation that meets the needs of constituents and ensuring their states are vibrant places to live, work and learn. There is no better way to guarantee the state's strength and vitality than to seek the best education for its children. Even though local school districts typically control day-to-day operations and manage capital budgets, there remains much that state legislators can do to lead efforts to green schools. Legislators can:

- Set green building standards for the construction of new schools and major renovations;
- Encourage policies to ensure operations and maintenance best practices; and
- Provide innovative funding mechanisms that create financing opportunities for green schools and promote green job training.

Like the integrated approach that defines green building, legislators should seek input from all stakeholders — fellow legislators, local business leaders, Realtors, school administrators, maintenance staff, teachers, students, parents, developers and green building practitioners — to develop legislation and initiatives that best reflect local and state needs. When working in collaboration with various stakeholders, legislators should be open to new ideas and innovative solutions. Leading the charge may require legislators to craft new tactics, form strategic alliances, and develop innovative ways to communicate with constituents.

Now is the time to be bold. Lawmakers should use their unique and trusted position to articulate a state-wide vision for green schools and to demonstrate a commitment to that vision by working with all stakeholders to craft meaningful and effective legislation — legislation that ensures all schools in the state are healthy environments conducive to learning while saving energy, resources and money.

One of the first steps is to investigate the variety of ways schools can become greener. This toolkit showcases the efforts of many states and provides a framework to begin outlining a plan. There is no one-size-fits-all approach, but the legislative solutions profiled provide excellent points of departure for getting started.



"As former school committee members, we know that the schools of tomorrow, whether newly constructed or renovated, need to facilitate the education of true 'sustainability natives.' As legislators who have made education reform a primary part of our public service, working within our legislatures to promote green schools through state legislation is a natural fit."

State Representative
Patricia Haddad
Massachusetts

State Representative
Sondy Pope-Roberts
Wisconsin

Building Support: The 50 for 50 Green Schools Caucus Initiative and the 2009 Green Schools State Legislative Summit

In September 2008, six state lawmakers, with the support of the U.S. Green Building Council, launched the 50 for 50 Green Schools Caucus Initiative. The initiative seeks to encourage and support the formation of a green schools caucus in every state legislature in the country. For the latest information about the 50 for 50 Green Schools Caucus Initiative, visit centerforgreenschools.org/50for50.

The following section of *Greening Our Schools* was developed during the 2009 USGBC Green Schools State Legislative Summit. Funded with the generous support of the Turner Foundation, USGBC convened 30 leading legislators from 25 states to discuss legislative solutions for greening our nation's schools. The summit provided an opportunity for legislators to strategize with leading green building and education experts, and together share success stories and generate ideas to promote healthy, high-performance schools in this challenging economy.

LEED: A Framework for Green Buildings

LEED is the internationally recognized green building certification system that provides third-party verification that a building or community was designed, built or is operating using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Developed by the U.S. Green Building Council (USGBC), a 501(c)(3) non-profit organization, LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

As of April 2010, 34 state governments have included LEED as a part of their climate change and green building strategies, 24 of which have established "Leadership By Example" policies requiring LEED for state government-owned buildings.



USGBC 2009 Green Schools State Legislative Summit
PHOTO COURTESY OF KRISTINA HOPPER

Additionally, LEED-based public policy initiatives — through legislation, executive orders, resolutions, ordinances, policies and incentives — can be found in more than 200 localities situated in 45 states across the United States. For the latest list of public policy efforts, visit usgbc.org/government.

The LEED for Schools rating system recognizes the unique nature of the design and construction of K-12 schools. Based on the LEED for New Construction rating system, LEED for Schools addresses issues such as classroom acoustics, master planning, mold prevention and environmental site assessment.

By addressing the unique characteristics of school spaces and children's health issues, LEED for Schools provides a comprehensive tool for schools that wish to build green, with measurable results. LEED for Schools is the recognized third-party benchmark for high-performance schools that are healthy for students, comfortable for teachers, and cost-effective.

Schools can be certified under the LEED for Schools or the LEED for Existing Buildings: Operations & Maintenance rating systems. Non-academic school buildings, such as free-standing gymnasiums or performance spaces, should use LEED for New Construction or LEED for Existing Buildings: O&M. See the LEED Facts section on page 53 for additional information.



"As state lawmakers, we have a paramount responsibility to make sure that our children are educated in healthy school buildings. In green schools, students learn about saving our planet and have the very best learning environment. This is an area where we need to lead — not follow."

State Representative
Karen May
Illinois



"Not only is this the first time I've had a chance to strategize with other allies on green schools, it is the first conference on green construction and retrofits that has focused on policy and the messaging that supports it. This has been the best organized and most useful summit on the new economy that I've yet attended."

**State Representative
Jules Bailey**
Oregon

Incorporating LEED into Legislation

The following sample language can be used in legislation for adopting green building rating systems which ensure third-party verification, including LEED:

"... must have achieved certification at no less than a [insert level of LEED targeted in existing policy here, for example, LEED Certified, LEED Silver, LEED Gold or LEED Platinum] level under the U.S. Green Building Council's most applicable current LEED rating system, or have achieved a comparable rating under no less than an equivalent green building rating system, so long as a qualified third party provides such a rating."

Legislative Action

STATES CAN SET GREEN STANDARDS FOR THE CONSTRUCTION OF NEW SCHOOLS AND MAJOR RENOVATIONS

States Can Require Green School Construction

State legislation can require new school construction and major renovation projects be built to trusted national green rating system guidelines. Doing so will demonstrate a commitment to providing healthy and safe schools, while exhibiting fiscal responsibility and promoting green jobs. Legislators can consider requiring the use of a third-party rating system, such as LEED, to ensure green benchmarks have been achieved.

LEED is the "gold standard" for designing, constructing, operating and maintaining green buildings. It is an internationally recognized certification system, providing third-party verification that measures how well a building performs in terms of energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources.

By requiring the use of the preeminent green building rating system, legislators can ensure buildings are constructed and maintained for maximum efficiency to reduce operating costs and designed with superior occupant health in mind.

As of April 2010, 12 states and the District of Columbia have adopted green school policies for new construction based on LEED: Arizona, Connecticut, Colorado, Florida, Hawaii, Illinois, Kentucky, Maryland, New Jersey, Ohio, Rhode Island, Washington, and Washington, D.C.

Sample Green School Legislation

Illinois

In 2007, the Illinois State Senate amended the *School Construction Law* (Public Act #95-0416) with the governor's approval, directing the Capital Development Board (CDB) to only issue grants to school projects seeking LEED or a comparable rating system certification or to projects that meet the standards set forth by the CDB's Green Building Advisory Committee. In 2009, Illinois approved HB0312, re-appropriating construction and modernization funding for Illinois schools consistent with the provisions outlined in Public Act #95-0416.

Maryland

On April 24, 2008, Governor Martin O'Malley signed the *High Performance Building Act* (SB 208) into law, requiring all new public construction and major renovation projects of 7,500 square feet or greater, and intended for occupancy, to earn LEED Silver certification or two Green Globes. The *High Performance Building Act* further requires that Maryland public schools using state funds earn LEED Silver certification or two Green Globes. The Act also states that "the State will pay half of any extra costs" incurred in building green public schools.

Rhode Island

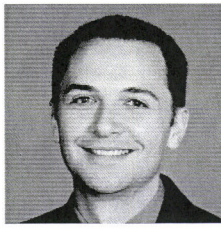
On February 25, 2010, State Representative Arthur Handy introduced the *Green Buildings and Job Creation Act* (HB 7720). The bill would require all public buildings to be constructed or renovated to meet "green building requirements" and provide for a revolving loan program for energy improvements. The bill defines "green building requirements" as the requirements that a building project be designed and constructed to achieve certification at no less than LEED Silver certification or an equivalent.

The bill provides for improvements to school district and government buildings and carries a provision for residential weatherization. Additionally, the bill specifically outlines renovations to schools be based on the LEED for Existing Buildings: Operations & Maintenance rating system (or equivalent), citing LEED as "a guide for high-yielding, and often low costing retrofit improvements to optimize operational and resource efficiency, and maximize benefits to human and environmental health."

States Can Set Standards to Green Existing Schools

With approximately 99,000 public schools in the United States, the greatest opportunity for state legislators to promote green schools to children, teachers and communities in their state is to encourage existing schools to go green. Most schools that undergo green retrofits and renovations will yield significant utility cost savings and improve occupant comfort and health.

State legislators can promote the greening of existing schools by passing legislation that encourages energy-efficient renovations and retrofits. The legislation can stipulate pursuit of LEED for Existing Buildings: Operations & Maintenance certification, when practicable, to ensure the school includes high-performance building systems and implements green operations and maintenance best practices. Training requirements for facilities managers and building operators can also be required in the legislation to ensure the new building systems are run efficiently in order to yield the desired energy cost savings from improved energy, water and solid waste management.



"I am proud to join legislators from across the country in working towards the use of green construction and design in our schools. We have the opportunity to set a green building standard that every community should strive for. Requiring renovation and new construction in schools to meet a minimum LEED standard can have tremendous impacts on the health and wellness of our students and teachers, while also saving on operating and maintenance costs of school buildings."

State Representative
Carl Sciortino, Massachusetts



"Greening our schools through energy savings projects should be the first solution legislators look to save money. Greening our schools doesn't just prevent harm—like other budget items might—it actually does good on many, many levels."

State Representative
Jeremy Kalin, Minnesota

States Can Benchmark Energy Performance of Existing Schools

Legislators can require all educational facilities to conduct energy audits, providing a baseline to help identify opportunities for improvement. State legislators can also promote the greening of existing facilities by passing legislation requiring all facilities to benchmark with ENERGY STAR Portfolio Manager. Portfolio Manager is a free online tool that allows building owners to track and assess energy and water consumption, performance and cost information for individual buildings and building portfolios. ENERGY STAR is also the required benchmarking platform for validating building performance in the LEED for Existing Buildings: Operations & Maintenance rating system. (ENERGY STAR Portfolio Manager is a program of the U.S. Environmental Protection Agency.)

States Can Ensure Training for Facilities Staff to Maximize Building Performance

Facilities personnel need to know how to operate high-performance building systems in order to maximize building performance. Legislation providing funding to renovate schools to green benchmarks should also include requirements and resources to train facilities personnel for ongoing maintenance.

States Can Offer Technical Assistance

Schools can promote the construction and renovation of green schools by offering technical assistance during the design and construction process through a state authority. Technical assistance is commonly offered by staff with professional green building credentials. Legislation can designate this position within the state government.

Green Building Fund for Technical Assistance

Washington, D.C.

In 2006, the Washington, D.C., City Council enacted a bill that established a Green Building Fund for technical assistance and monitoring of green buildings, education and incentive funding for private buildings.

STATES CAN REQUIRE POLICIES THAT ENSURE OPERATIONS & MAINTENANCE BEST PRACTICES

States Can Require Green Cleaning Practices

Instituting a green cleaning program can improve the indoor environmental quality for students, teachers, and staff, reducing instances of asthma and other illnesses that are major causes of absenteeism. Green cleaning supplies do not need to cost more than conventional cleaning supplies.

A green cleaning policy can include:

- Criteria for the purchase and use of sustainable cleaning chemicals and products
- Methods for managing the disposal of cleaning materials
- Best practices for mixing concentrates
- Criteria for the purchase and use of janitorial equipment, and
- Plans to assess cleaning performance.

Green Cleaning Schools Act

Illinois

The *Green Cleaning Schools Act* (Public Act 095-0084) requires the Illinois Green Government Coordinating Council, in consultation with other agencies, to establish and amend annual guidelines and specifications for environmentally sensitive cleaning and maintenance products for use in school facilities.

All elementary and secondary public and non-public schools should establish a green cleaning policy and exclusively purchase and use environmentally sensitive cleaning products pursuant to the guidelines and specifications.

A school may deplete its stock of existing cleaning and maintenance supplies and implement the new requirements in the procurement cycle for the following school year.

States Can Require Indoor Air Quality (IAQ) Management Programs

Improved indoor air quality enhances the well being of students, faculty and staff and can help to increase attendance rates, performance and productivity. Legislation can require the development and implementation of an ongoing indoor air quality management program, using such programs as the EPA's Building Education and Assessment Model (I-BEAM). I-BEAM is a free tool to manage indoor air quality in buildings and includes information on how to:

- Conduct an indoor air quality building audit
- Ensure that energy-efficient building systems are compatible with IAQ
- Better manage housekeeping services for IAQ
- Train management and staff in indoor air quality management
- Provide documentation that the building is following IAQ building practices, and
- Reduce liability exposure to indoor air quality complaints.

States Can Require Integrated Pest Management Policies

Pests and the pesticides used to deter them can be harmful to occupants and facilities. An integrated pest management plan protects school occupants by reducing the application of harmful pesticides. Legislation can require the adoption of such a plan based on the specifications outlined in the LEED for Existing Buildings: Operations & Maintenance rating system. Integrated pest management plans can be more effective than conventional pest control methods because they treat the underlying causes of pest problems. The programs also tend to be less expensive because they require less pesticide application.

STATES CAN PROVIDE INNOVATIVE FUNDING MECHANISMS FOR FINANCING GREEN SCHOOLS AND ENCOURAGE GREEN JOBS

In this challenging economic climate, legislators can support green schools by promoting innovative funding mechanisms. Options include grant programs, revolving loan funds, tax abatement and rebates, performance contracting, and tax-exempt lease-purchase agreements, among many others.

States Can Establish Green Building Grant Programs

States can award grants to encourage the construction of green schools and the renovation of existing facilities to green standards. Grant programs can use the LEED for Schools or LEED for Existing Buildings: Operations & Maintenance rating systems to develop the criteria for awarding grants.

States Can Create a Revolving Loan Fund

States can create a revolving loan fund to finance building improvements that generate utility cost savings. The savings, in turn, are used to replenish the fund.

Allocating state money to be used for revolving loan funds can promote the construction and renovation of green schools. By providing low-interest loans from a large fund, financial barriers can be removed for schools pursuing green initiatives. The fund, regularly replenished from utility savings, can provide loans to additional educational facilities on a continual basis, turning a one-time appropriation into a perpetual investment program. Priority can be given to projects pursuing requirements of LEED or equivalent.

Revolving Loan Fund

Colorado

The Renewable Energy and Energy Efficiency for Schools Loan Program Act (HB09-1312) created a program that provides school districts with low-interest loans for renewable energy. The loans can be used to install solar panels or wind turbines on site, or can be used to convert diesel-powered school buses to battery or hybrid-electric power.

States Can Share Maintenance Funds

States can share or match maintenance funds with school districts to encourage the proper maintenance of school facilities. Legislation can stipulate that green operations and maintenance (O&M) standards are required in order to receive the funds. The legislation can also specify training on O&M best practices and establish more favorable criteria for schools that meet green standards.

States Can Offer Tax Abatements and Rebates

States can offer tax abatements to companies who implement energy-efficient building systems. Converting a portion of the abatement to a direct rebate will help lower up-front costs and encourage companies to take on the project. Furthermore, because green retrofits usually generate savings in operations costs, the tax abatement can save the state money.

States Can Enable Performance Contracting (PC)

States can enable performance contracting (PC) — also known as energy performance contracting (EPC) or guaranteed energy savings performance contracting (ESPC). PC is a well-established means of procuring and financing needed building repairs and upgrades. Under performance contracting, building owners contract with an Energy Services Company (ESCO) to act as the project developers for a wide range of tasks and to assume the technical and performance risk associated with the project, including guaranteeing the cost savings generated from the system upgrades. The costs savings are used to pay for the upgrades within a specific pay-back period.

In addition to allowing performance contracting, states can encourage the use of green performance contracting (Green PC), a process based on the same project-delivery methods as traditional performance contracting, but enhanced by the inclusion of the LEED for Existing Buildings: Operations & Maintenance rating system as green criteria. The range of project measures in a Green PC project is broader than the utility system upgrades found in a traditional performance contract and allows for the inclusion of O&M best practices and sustainable policies.

Performance contracting and Green PC can provide funding for significant renovations and retrofits, while mitigating up-front costs. Because states manage the liability and financial risk on an aggregate level, some states do not allow public entities, including school districts, to engage in long-term contracts, thus prohibiting performance contracts. Legislation that allows schools to use performance contracting to green facilities can mitigate the issue of long-term contracts by setting a maximum time frame. The legislation can also require a pre-approval process of contractors compiled by the state's department of energy.



"One reason I am most excited about greening our schools is the ease of financing these projects. The energy savings provide reliable revenue to pay for the needed upfront capital, such as high-efficiency boilers, roofing, insulation, or air conditioning and lighting upgrades. Some states, such as my state of Minnesota, have adopted lease-purchase financing frameworks to mobilize local banks as lenders for school energy improvement projects. Other states have used capital bonding authority to finance these improvements, finding the payback period so short that school operating budgets have been stabilized or even reduced in just a couple of years."

**State Representative
Jeremy Kalin
Minnesota**

States Can Establish a Tax Credit Pass-through Option

States can establish a tax-credit “pass through” option that allows a project owner — the school district — to transfer tax credits to a partner in exchange for capital to assist with project costs. Under the program, a state can allow schools and other non-taxable entities to “sell” tax credits to pay for the installation of green retrofits and energy-efficient renovations to a third party for a cash payment. The payment is used to fund the renovation.

Business Energy Tax Credit and Pass-through Option

Oregon

Oregon’s Business Energy Tax Credit Pass-through Option allows a project owner to transfer a tax credit to a pass-through partner in return for a lump-sum cash payment upon completion of the project. The Pass-through Option currently allows non-profit organizations, schools, governmental agencies, tribes, other public entities and businesses without tax liability to use the Business Energy Tax Credit by transferring their tax credit for an eligible project to a partner with a tax liability.

States Can Promote Tax-Exempt Lease-Purchase Agreements

States can assist schools with the purchase of building-system improvements as part of a retrofit or renovation by encouraging tax-exempt lease-purchase agreements. A tax-exempt lease-purchase agreement is an effective alternative to traditional debt financing because it allows organizations — including schools and other government entities — to pay for energy-saving upgrades by using money set aside in the annual utility budget. When properly structured, tax-exempt lease-purchase agreements can allow public-sector entities or qualifying organizations to draw on the anticipated savings from future utility bills to pay for new, energy-efficient equipment and related services up-front.

States Can Encourage Public-Private Partnerships

States can establish public-private partnerships to help promote green schools. Partnerships can be forged to research strategies, develop a green schools plan, and, if structured to do so, serve as a financing mechanism.

Public Private Partnerships

Illinois

Illinois State Representative Karen May, in collaboration with the USGBC Illinois Chapter and several civic and corporate partners, established a public-private partnership to help three Illinois public schools achieve LEED for Existing Buildings: Operations & Maintenance certification. The partnership is providing resources and guidance to these schools, and will fund any additional costs incurred to achieve certification. The goal is to provide a model for implementing a state-wide campaign to green existing public schools. The three pilot projects are: Prescott School, Chicago; Prairie School, Urbana; and Lakewood School, Carpentersville.

The project will provide a blueprint for a state-wide campaign by:

- Determining the actual costs of achieving LEED for Existing Buildings: Operations & Maintenance certification for existing schools,

- Identifying barriers within the existing building code and/or local codes that prevent schools from implementing green strategies and technologies,
- Deciding how school districts can use traditional energy performance contracting, green performance contracting and existing funding to green an existing school, and
- Identifying opportunities to tap into community resources

The project will produce a comprehensive report on the process and individual case studies for each of the three schools.

State Representative Karen May introduced *HJR 45* to create a LEED task force to offer input into the project's process and final report, and to make recommendations concerning the creation and financing of a system to ensure that existing public schools are retrofitted to support resource efficiency and sustainability.

Members of the task force include representatives from: the Illinois House and Senate (as appointed by the majority and minority leaders from both houses), Illinois Governor's Office, Illinois Department of Commerce and Economic Opportunity, Illinois Capital Development Board, Illinois State Board of Education, and the USGBC-Illinois Chapter. The task force will create a final report of its own to be submitted to the Illinois General Assembly on or before November 1, 2010.



"Investing in schools means not only adequate and stable funding, but also ensuring we have healthy, high performance learning environments for our children."

State Representative
Jules Kopel Bailey
Oregon

States Can Encourage Green Schools by Promoting Green Job Training

Legislators can use green schools as a catalyst for green job creation and training. In Washington State, legislators introduced a house bill (*HB 2561*) that would issue \$861 million in general obligation bonds for the purpose of creating jobs by constructing capital improvements that lead to energy related cost savings in public schools, state colleges and universities, and other public facilities.